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# MOVING YOUR CUSTOMERS *and* WHAT THEY BUY



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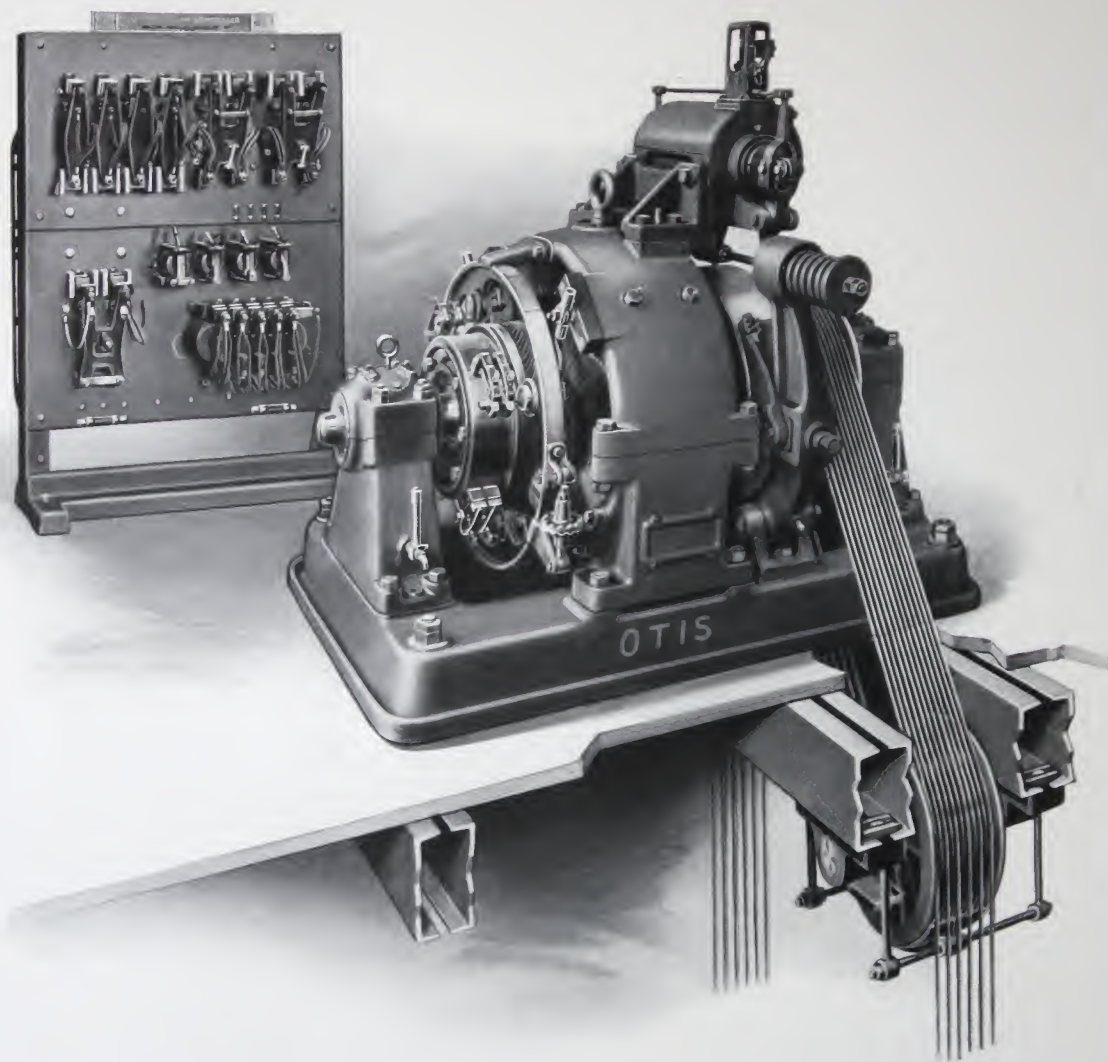
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# MOVING YOUR CUSTOMERS *and* WHAT THEY BUY

Brief Suggestions for Increasing  
Business *by* Improving Service

OTIS ELEVATOR COMPANY  
Eleventh Ave. & Twenty-Sixth Street  
NEW YORK  
Offices in all Principal Cities of the World.





An Otis Elevator Machine of the 2:1 gearless traction type, located over the elevator hatchway. A highly efficient and economically operating elevator which is particularly suited to use in the busy, modern store.





A

CERTAIN merchant once posted above his desk a little card on which was printed in clear, bold type these resolutions:

1. I MUST LOSE NO SALE BECAUSE OF INADEQUATE FACILITIES.
2. I MUST CIRCULATE MY CUSTOMERS ABOVE THE MAIN FLOOR.
3. I MUST BE PREPARED TO QUICKLY REPLENISH MY STOCKS.
4. I MUST HANDLE PACKAGES RAPIDLY AND WITHOUT LOSS.
5. I MUST MAKE MY DELIVERY SERVICE SPEEDY AND SURE.

THE COMBINATION OF ALL THESE CONSTITUTES SERVICE TO MY CUSTOMERS.

There is a fundamental selling principle in each of these resolutions that should serve as a suggestion to every merchant who seeks to increase his sales through the perfection of his service.

No store, today, can be without modern equipment and look for success upon the basis of reputation and good merchandise values alone. Strenuous competition, coupled with the demands of the buying public, is compelling better equipment, greater service.

Full value for money received and good advertising are primary requisites to merchandising success, for they are the selling principles that *attract* trade to the store. Good equipment and complete facilities for shoppers' comfort and service are equally important, for these are the properties that *hold* trade to the store.

Of all the equipment necessary to the successful conduct of business the transportation equipment is paramount.

And here is where "Otis equipped" stores succeed over others.

In so far, too, as the service equipment of a store becomes known to the public—and with many stores it is constantly featured in the advertising—the equipment performs the double function of *drawing* customers and *retaining* customers.

There are two factors in a store's transportation system—the equipment for moving *passengers* and the equipment for moving *merchandise*.

The first has to do with the circulation of customers throughout the store; the second with the movement of stock and the delivery of purchased articles.



The proper circulation of passengers is logically the first step to be planned, for it is only by getting customers before the counters that an opportunity to sell goods is created.

### PASSENGER TRANSPORTATION

Modern store planning, with its many details as to height of buildings, aisle spaces, location of counters and department placing, is largely dependent upon passenger transportation facilities.

The development and perfection of Elevators and Escalators have introduced many new ideas in these respects which invariably operate to the convenience of the shoppers and the profit of the proprietor.

For example, we have the stores of eight, ten and twelve floors, or even higher, common now where a few years ago they were rare.

Moreover, the extraordinary efforts on the part of the merchant, in the past, to locate as many counters as possible on the main floor with the smallest possible space allotment to each, have generally been abandoned with access to upper floors made easy by Elevators and Escalators. Counters with quick-selling stocks are placed on the second or even the third floors without loss of patronage. The result is a lessening of the crowds on the main floor, larger crowds on the upper floors and a greater space allotment to all departments.

With ample Elevator and Escalator service, then, a more even circulation throughout the entire building is accomplished. The freedom of movement and greater comfort that are gained tend to create in the customer's mind a distinctly favorable attitude towards the store and its policies. More specifically, a condition is established that attracts a greater number of customers; that does away with congested aisles; that gives freedom to shoppers; that promotes a more thorough examination of the store and its goods; that produces opportunities for more careful selections; that makes for increased sales, vigorous and wide-awake clerks.

### MERCHANDISE TRANSPORTATION

The systematic movement of merchandise is the next step in the store plan. The necessity for good merchandise handling systems, is of as much importance as the necessity for good passenger transportation apparatus.

The public may not realize the reason for this, but it most decidedly appreciates the results of efficient systems of merchandise handling.

The store owner, on the other hand, can understand how essential it is to provide for the uninterrupted replenishing of stocks to bring packages to the sorting room without congestion, theft or loss and to get them into the delivery wagons on time and without confusion.





Battery of Otis Elevators in a Department Store

The various merchandise handling systems inaugurated through the use of Otis Store equipment, which includes Elevators, Dumbwaiters, Gravity Spiral Conveyors and Inclined Elevators, do all of these things and do them in the most economical, surest and quickest way known—the scope and moderate expense of the apparatus rendering the establishment of these systems easy for the small store as well as for the large.

#### WHEN YOUR EQUIPMENT IS COMPLETE.

The *extent* of equipment in the store should be a matter of thorough investigation. It should never be planned for the *average* business, but should meet the requirements of the *largest* volume of business of a very short season. Goods are sold when people are in the store, and if at such times the facilities for passenger and package transportation are inadequate lost sales are frequently the result; furthermore, in equipping for the largest day's business you provide also for a normal growth that will not overtax your equipment.



Together and separately, Elevators, Escalators, Electric Dumbwaiters, Gravity Spiral Conveyors and Inclined Elevators have always brought more business, bigger profits. Each performs a particular service and each links in with the general merchandising system.

## E L E V A T O R S

**E**LEVATORS are responsible for the modern large store but the present many types of elevator machines, with their varied capacities and speeds, bring the installation of elevators within the use and pocketbook of the smaller dealer, as well. How great a convenience they are can be realized only after the installation.

For instance, the store may be but two or three stories in height—the stock room at the top of the building. If the business does not warrant an expenditure for power-driven apparatus, a hand-power elevator makes it easy to get the incoming shipments up to the stock room and equally easy to distribute and replenish stock at the counters. Again, if your stock is now occupying space that would be valuable for sales purposes, the installation of an elevator enables you to remove this stock to a floor above and obtain the full value of the sales space on the ground floor.

For larger stores, Otis elevators offer a wider selection. Among the various types used in store service are found electric drum machines and worm-gear traction machines. Recently, the perfection of the Otis Gearless Traction Electric Elevator of the 2:1 type with its moderate speeds, has enabled stores to secure a thoroughly reliable and economically operating elevator, similar in construction and general efficiency to those used in the greatest office buildings and hotels.

This type of elevator is inherently safe. It derives its name from the fact that motion is obtained by means of the traction existing between the driving sheave of the machine and the hoisting cables. The elimination of intermediate gearing in the machine reduces the working parts to the fewest possible elements and permits of the greatest simplicity of installation and economy of space. The smooth-running qualities of this elevator, its accurate starting and stopping features, and the feeling of solidity and security that one has when riding in it, will recommend it to your better judgment and to the service of your customers.

Sooner or later your store will need elevators, whether they be sidewalk lifts, hand-power elevators, freight elevators or a large battery of passenger cars. It is needless to dwell here upon the *quality* of Otis Elevators for stores. Their universal use for over sixty years is the best recommendation



B Y I M P R O V I N G Y O U R S E R V I C E



How an Otis Elevator of the 2:1 gearless traction type appears when installed. Note the sheaves on car and counterweight and the method of roping, which gives the moderate speeds desirable for department store service.



of their safety, structural strength and reliable operation. In the array of stores so equipped are found the leaders in merchandising throughout the world.

The selection of proper elevator equipment is of the utmost importance. You cannot afford to have elevators upon which you cannot depend.

Otis Elevators, of every type, are always dependable.

## ESCALATORS

**E**SCALATORS are intended to supplement the elevators in a store, not to supplant them. The Escalator idea gained prominence some fifteen years ago and the extent to which it has spread is evidenced by the large number of stores which now use and approve of Escalators. Some of them are:

Name	Location	No. of Escalators
R. H. Macy & Co.	New York	5
T. Eaton Co. Ltd.	Toronto	3
Wm. Filene's Sons Co.	Boston	2
The Fair	Cincinnati, O.	1
Meier & Frank	Portland, Ore.	7
Mandel Bros.	Chicago	6
Kaufman Dept. Stores, Inc.	Pittsburgh	4
Kaufman & Baer Co.	Pittsburgh	4
Frederick Loeser & Co.	Brooklyn	2
E. W. Edwards & Son	Syracuse	1
E. W. Edwards & Son	Rochester	1
R. H. White Co.	Boston	1
Siegel Cooper & Co.	Chicago	5
Famous & Barr Company	St. Louis	3
May Company	Cleveland	3
L. Bamberger & Co.	Newark	5
Lit Bros.	Philadelphia	4
Bloomingdale Bros.	New York	1
Redelsheimer & Co.	Seattle	1
Boston Store	Chicago	19
W. & A. Bacon	Boston	10
Denver Dry Goods Co.	Denver	1
Sanger Bros.	Dallas	2
The Herpolsheimer Co.	Grand Rapids, Mich.	1
J. G. McCrorey	Louisville, Ky.	1
Rosenbaum Co.	Pittsburgh	6

Escalators do not pay in any but the busy store. This does not imply that a store must be large to use an Escalator profitably, but it must be busy; or it must be so situated that it can be *made* busy.

Escalators help make stores busy.

An Escalator is a moving stairway, in the form of an endless moving





Macy's, New York.



Kaufman Dept. Stores, Inc., Pittsburgh.



Denver Dry Goods Co., Denver, Colorado.

Some stores equipped with Step type Escalators.



platform, upon which one may step at any moment and be carried upward or downward at a moderate rate of speed, comfortably, safely and without physical effort.

There are two types of Escalators, known as the Step and the Cleat types. Briefly their construction and operation are as follows:

The Step type begins as a moving platform; then, as it goes onward, it breaks into steps, rising slowly into a perfect staircase, but moving steadily and noiselessly a little faster than one can ordinarily walk. On each side, a hand rail of flexible material moves upward at the same speed as the stairs, thus affording the passengers a secure support as they ascend. At the top the steps flatten out into a moving platform again, from which the passenger steps to the stationary landing on the same level so easily that the transition from the moving to the stationary surface is barely noticeable. An electric motor drives the mechanism running on rollers on an inclined plane, which supports the treads and risers at the proper angle.



Step type Escalator with comb landing plate.  
Mandel Brothers, Chicago, Ill.

The Cleat type is a moving stairway without the steps. It is formed of hardwood cleats located in longitudinal ridges and grooves. On each side is a handrail, moving at the same speed. The platform, revolving over the lower sprocket, glides through the prongs of a cast-iron comb at the lower level and journeys upward at a moderate speed. At the upper landing it disappears through a comb landing plate, and revolving over a sprocket, travels downward. The passenger is landed upon the prongs of the comb at the top in safety and without jar or shock.

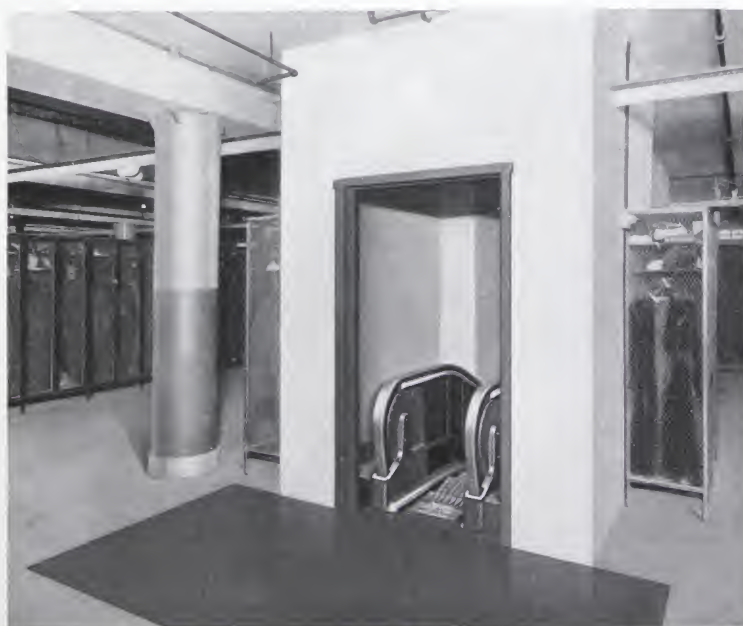
Escalators, because of their continuous motion, have an enormous capacity. They are capable of carrying any





The Employees' Escalator in Abraham & Straus, Brooklyn, N. Y. Vertical rise 39 feet 9 inches. By its use the employees avoid a climb of two long flights of stairs. The return on an investment of this sort is secured in the refreshed and cheerful attitude of employees and their greater capacity for work.

View at the top landing of the Escalator which leads directly into locker rooms. This Escalator is reserved for employees' exclusive use and carries the sales girls to and from their posts in the morning, at noon and at night. At closing hour 900 girls have been carried by the Escalator in fifteen minutes, a capacity of 3600 per hour.





where from 3,600 to 11,000 people per hour, depending upon the type and size of the Escalator used. It is apparent, therefore, that Escalators, due to the very nature of their construction, can perform certain definite services of immeasurable value to the store.

They provide means to keep moving every customer that comes into the store; they take care of the elevator "overflow" in the busy seasons; they relieve congestion in the elevators; they keep shoppers in the store "atmosphere" as they ascend and descend; and they attract the "sightseers",



Cleat type Escalator in the Kaufman & Baer Co., Pittsburgh, Pa.



An Escalator which leads directly from the street to the second floor, Wm. Filene Sons, Boston, Mass.

leading them subconsciously to explore the most remote corners of the store.

The investment return on Escalators is well illustrated in the results of a count made in two New York stores during a busy Christmas shopping season. In the store with complete Escalator service 53% of those who entered the store circulated above the ground floor. In its neighbor, without Escalators, only 28% traveled above the ground floor. In the two stores all other transportation facilities are approximately equal. By the use of Escalators, store No. 1 gains a 25%





This illustrates the attractive view of your store that the customer obtains when riding on Escalators. It represents the best sort of salesmanship that you can inject into your selling methods—the creating of a desire to buy by subtle suggestion.





Cleat type Escalator in Bamberger's, Newark, N. J.  
There are five such Escalators in this store.

increased circulation over store No. 2. This increase undoubtedly represents a greater buying power. It certainly presents a broader opportunity to display merchandise and a better chance to sell goods.

Placed, as they usually are, near the main entrances, Escalators tend to attract the bulk of the desultory shoppers as they enter, leaving the elevators to carry those who wish to reach the uppermost floors or those whose destination is predetermined and definite.

The Escalator idea, in its early years, was almost timidly adopted by most of the stores whose equipment is now the most extensive. Beginning, usually with a single Escalator from the ground floor to the second, it was quickly found that another was needed to bring the second floor in touch with the third; then still more to connect the floors above; and in other parts of the store, so that certain territories would be brought within the radius of elevating apparatus.

Then, as upward moving Escalators began to circulate customers over the second, third, fourth, fifth and even sixth floors, it was realized that some means must be provided to carry these increased numbers down—not possible by the elevators alone, often operating under pressure. Descending Escalators were the natural and logical means.




<p><b>The Macy Escalators</b></p> <p>are safe, convenient and comfortable. They connect at each floor up to the Sixth.</p>	<p>R. H. Macy &amp; Co.'s Attractions Are Their Low Prices.</p> <h1>Macy's</h1> <p>Herald Square, Broadway, 34th to 35th St.</p>	<p><b>The Macy Fur Storage</b></p> <p>gives your furs real protection against moths and fire. The charges are very moderate.</p>
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**TUB DRESSES**

**Save \$154.00**

Escalators featured in Macy's, N. Y. Advertising.

**Filene's**



**W**ELL IT JUST GOES TO SHOW that men do not need to be megaphoned when a worth-while message is in the air. A day or two ago we employed modern newspaper space, quiet type and just a hint of illustration in announcing that the prices of 481 Men's Summer Suits were cut plumb in half.

Yesterday was the first day. The escalator that makes a street floor of our second floor could have told an interesting story at five o'clock in the afternoon—a story of almost a continuous procession of men ascending and descending. The selling force in the Men's Suit Shops had their hands full. They could not have sold any more suits comfortably.

**TODAY IS THE SECOND DAY**—A varied stock of all-wool fancy suits remains to be disposed of at \$8 instead of \$16, and so on up to \$22.50 instead of \$45, with seven half prices between.

**IN ADDITION** we shall offer, beginning this morning, 86 MEN'S SUMMER SUITS AT HALF YESTERDAY'S PRICES. Khaki, crash, linen, mercerized cotton, white flannel, striped serge or silk, \$2.50 to \$12.50 instead of \$5 to \$25. Two-piece suits, sack or Norfolk coats.

**THAT IS NOT ALL.** This morning we place on sale 159 pairs of MEN'S OUTING TROUSERS at keen price lessenings. Plain white flannel, plain white serge and many striped patterns in both flannel and serge. Prices had been \$5 and \$6—now \$3.45.

**A POINT TO BEAR IN MIND:**—All these suits and trousers are of the elect—all from regular Filene stocks—all representing merchandise upon which the success of this new clothes shop for men has been built.

**TODAY IS THE DAY.**

Served from—reached by escalator just off Washington Street

**William Filene's Sons Company.**

Outfitters to Men and Little Boy

How Wm. Filene Sons influences direct access to departments placed on second floor in its Advertisements.

**KAUFMANN'S**

**THE BIG STORE**

5th AVE. SMITHFIELD & DIAMOND STS.

**OUR ESCALATOR (Moving Stairway)**

Is proving one of the most attractive innovations ever installed by "The Big Store." Step in To-Morrow and enjoy the novelty of "Going Up" on the Moving Stairway. Everybody's doing it.

How Kaufman's, Pittsburgh, Advertises its Escalators.

**Boston Store**

STATE MADISON AND DEARBORN STS.



**CHICAGO'S GREATEST XMAS GIFT STORE**

**MOVING STAIRWAYS NOW**

FROM 1st TO 10th FLOORS UP AND DOWN

Christmas Poster used by Boston Store, Chicago. The Escalator Equipment is the feature appeal.

Making the most out of their equipment.  
How Escalators are featured in Department Store Advertising.



And so has the equipment been gradually extended in many stores until complete batteries of up and down Escalators are pouring their crowds over the sales floors by the hundreds—and in busy seasons, by the thousands.

The Escalator idea is a good idea to absorb. Can you afford to let your competitor work out his Escalator plans before you do?

## ELECTRIC DUMBWAITERS

**T**HE complete systems for stock distribution by means of Electric Dumbwaiters used in many stores, offer valuable suggestions to the store which wishes to establish instant communication between counter and stockroom. These silent messengers glide up and down at the press of a button, carrying the stockrooms above or below and returning, loaded with goods, to replenish the depleted counters. Quiet, unobtrusive, dependable, they do the work of an army of errand boys or girls.

In a typical installation, for example, there are five electric pushbutton dumbwaiters, two of which operate in one bank between the second sub-basement and the eighth floor (serving all intervening floors), two between the first sub-basement and the shoe department located on the mezzanine floor, and one between the second sub-basement and the mezzanine floor.

The two high-rise dumbwaiters are equipped with what is known as "one point control"; that is the cars can be controlled only from a master station which is located on the seventh floor near the dumbwaiter shaft. At this station the operator, by means of a master controller, causes the car to be sent to any predetermined floor.

On each floor near the shaft is a push-button for calling the car, and mounted in the base of the car is a bank of push-buttons (one for each floor) for signaling to the operator at the master station the number of the floor to which the car is to be sent after being loaded. These buttons connect with a switchboard at the master station, where an annunciator indicates the floor at which the elevator is desired and the one to which it is to be sent.

The apparatus is automatically arranged, so that when a car is in use its operation cannot be interfered with, or when any door on the shaft is open the car cannot be started. Slack cable arrangements cause the mechanism to stop when there is an obstruction in the shaft.

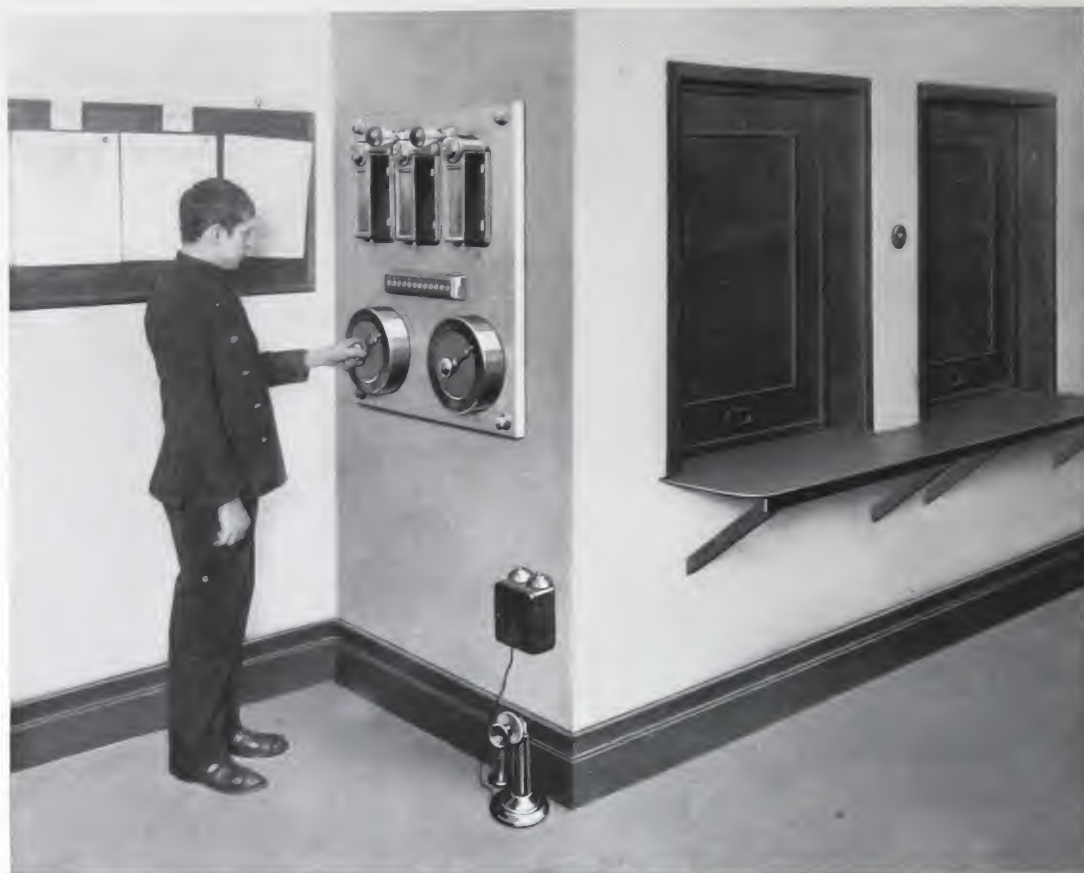
The dumbwaiters operating between the sub-basement and the mezzanine floor require no operator. They have full automatic push-button control, that is the cars can be controlled from any floor and can be brought to or sent to any floor by simply pushing a button. The automatic features used on the high-rise cars to prevent interference when the car is in use





Electric Dumbwaiter Installation with machine  
in basement, showing call buttons.





Master operator at work, Hub Store, Chicago, Ill.  
The travel of the high rise Dumbwaiters are controlled in this way.

and to prevent the car from being started when a door is open, are used on these machines.

The capacities and speeds of electric dumbwaiters may be varied for loads up to 500 lbs. and operated at speeds to suit specific requirements. The dumbwaiters in the store mentioned are capable of carrying 250 lbs. at a speed of 350 feet per minute. They automatically slow down and come to a positive stop at the floors to which they are sent.

For the smaller store, the electric dumbwaiter is a convenience that amounts almost to a necessity. Ease of control, surprisingly small power costs and great capacity are qualities which are all present in the electric dumbwaiter. They provide for quick transfer of packages between floors without the labor incident to the operation of the hand-power elevator, and without the big space necessary for a large freight elevator.



## MAINTAINING ELEVATOR SERVICE

**A**FTER the installation of elevators and escalators in your store comes a consideration hardly less important than the original selection of elevating equipment. It is the care that you give your elevators.

Elevators, like all other machinery, need attention and thorough lubrication, if they are to give the service of which they are capable. Experience has shown that ordinary commercial oils, no matter how good they may be, have not the proper qualities for the lubrication of the various parts of *elevator* equipment. Accordingly, special oils and greases, compounded only after years of exhaustive study, were prepared and these bring to you every quality needed for a particular work. These Otis lubricants—supplied solely by the Otis Elevator Company—are ten in number. Among them you will find just the lubricants that the type of machine which you use, requires. They are:

**BALL BEARING LUBRICANT**  
For Slow-Speed Heavy Duty Ball-bearing Sheaves

**WORM GEAR LUBRICANT**  
For Worm Gear Lubrication

**MOTOR BEARING OIL**  
For Motor and Machine Bearings

**PLUNGER LUBRICANT**  
For lubricating plungers and horizontal hydraulic cylinders

**A. C. BRAKE MAGNET OIL**  
For dissipating heat generated in Coils

**TRACTION BEARING OIL**  
For lubricating Gearless Traction Machine Bearings

**BUFFER OIL**  
For Otis Oil Buffers

**GUIDE LUBRICANT**  
For steel and Wood Guide Strips

**COMPRESSION CUP GREASE**  
For Bearings and Sheaves fitted with Compression Cups

**CABLE PRESERVATIVE**  
For all Cable Lubrication

In order that your store may get these quickly when needed, stocks are maintained in every branch Otis Elevator office in the country—and this means over one hundred such offices in the United States alone.

Another simple device which will help your store to have always efficient elevator service is the Otis Controller Parts Cabinet. This is a small, compact, metal cabinet which can be conveniently hung in the engine or elevator motor room. Contained in it are all the principle repair parts for the type of elevator Controller that you use, and from it the engineer in charge can make Controller repairs quickly and



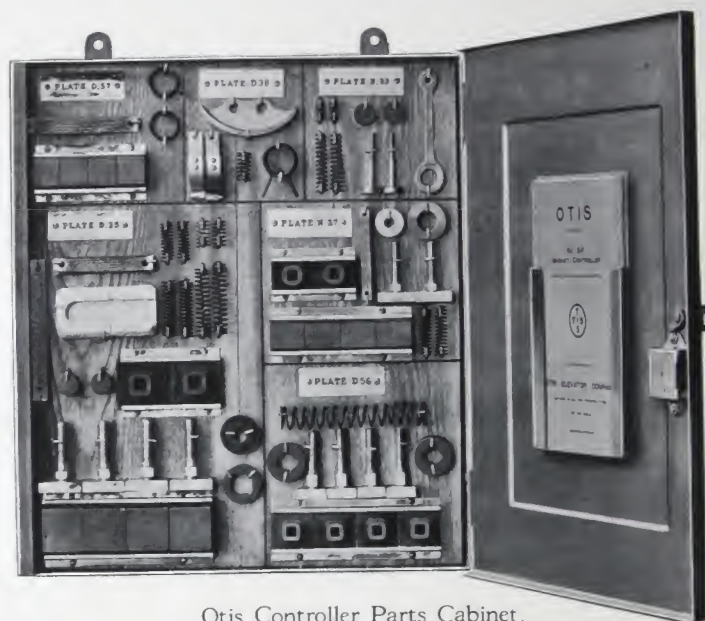
Otis Elevator Lubricants.



with very little interruption to the elevator service. You can use this Controller Parts Cabinet if your machine is a Direct Current elevator. They are supplied for these types only up to the present time.

We have inserted this little lesson on the care of your elevators because of its important bearing on the service you seek to give your customers in the shape of a reliable and smoothly running battery of elevators.

Up to this point we have considered the ways and means of obtaining proper customer circulation and systematic merchandise distribution; we have seen how a thoroughly comprehensive equipment helps to get stocks behind the counters and customers before the counters. This brings us to the sales transaction itself and to the problem of quick handling and prompt delivery of "sold" merchandise.



Otis Controller Parts Cabinet.

Let us start from the time goods are sold. The purchased articles must be wrapped and sent to the purchaser's home in the quickest possible time. Here is where enters the use of

## GRAVITY SPIRAL CONVEYORS

**G**RAVITY Spiral Conveyors, utilize the force due to gravity, to convey packages and merchandise upon a fixed blade within a circular shaft from upper floors to lower floors or shipping and assorting rooms below.

It was just twelve years ago that the first Otis Gravity Spiral Conveyor was installed. Well over one hundred department stores are now





Nearly 150 Stores are equipped with Otis Gravity Spiral Conveyors. This picture shows the three outlets in basement of Mandel Brothers, Chicago, Ill.

benefiting by their use—and all of these are not among the “biggest” stores. If your store occupies more than one floor, a Gravity Conveyor will save money in the handling of packages.

Gravity Conveyors do reduce expenses, for after the installation cost there is no care, no maintenance expenses, no costs for power. Gravity is the unpaid force that makes these Conveyors economical.

There are three types for store use—one, two and three spiral—and there are so many systems of locating the inlets and outlets that no definite arrangement can be advised until the requirements and service to be rendered are carefully studied and planned.

After purchases are wrapped they may be deposited upon the conveyor without regard to the articles coming down from above. Instantly they are whirled away (not too rapidly, for even the most delicate of articles may be sent this way), ending their journey in the basement upon traveling belts, which carry them to the sorting tables or directly upon a transfer or recording desk.





Mrs. Marsh purchases a shirt waist to be delivered—"Charge."



Mrs. Blake telephones for a table cloth to be delivered—"C. O. D."



Gimbel Bros.' New York Store where both orders are received.



After the package is wrapped the Otis Gravity Spiral Conveyor carries Mrs. Marsh's "Charge" purchase at once from the third floor to the shipping room.



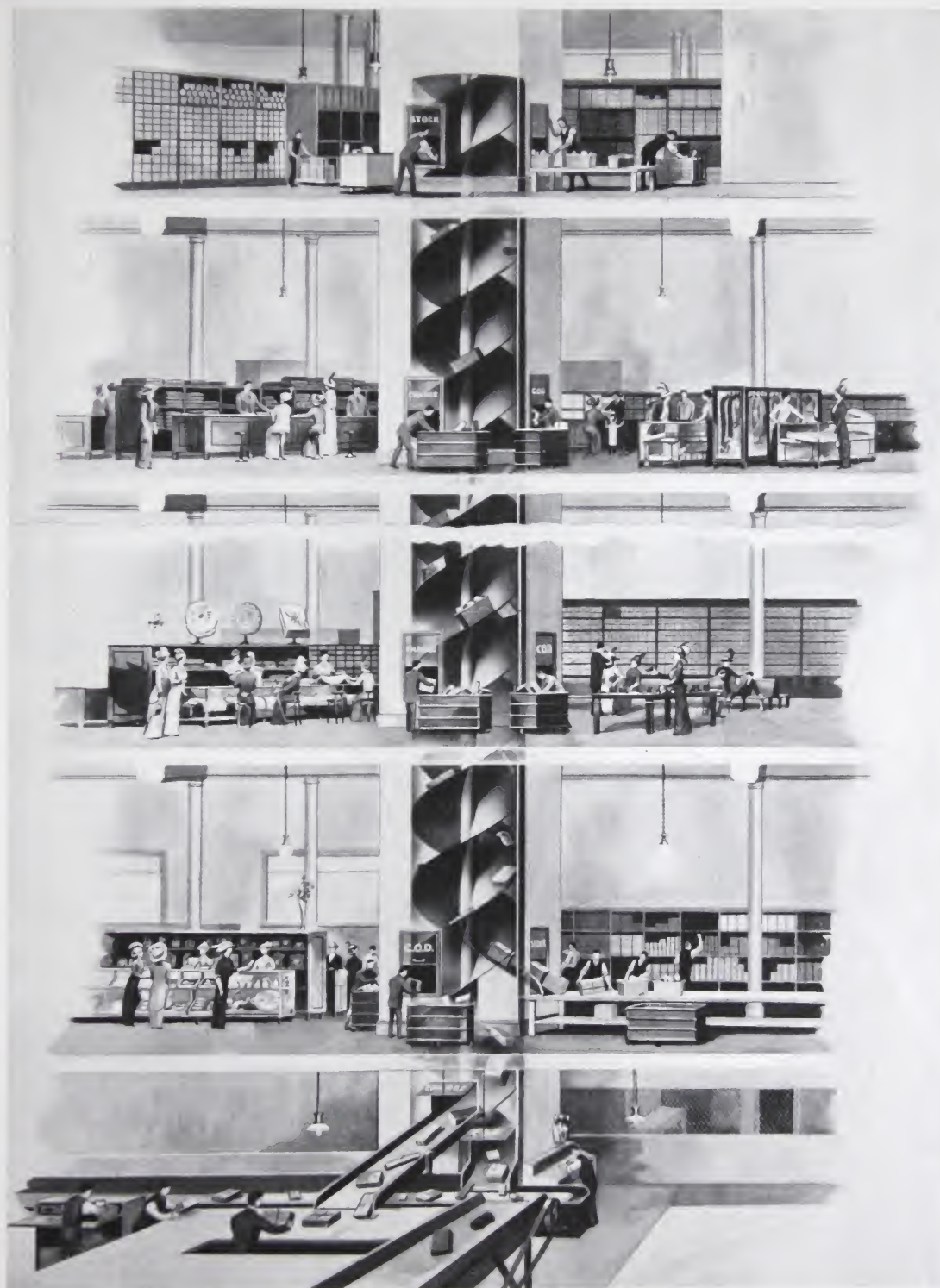
Another spiral of the same conveyor takes Mrs. Blake's "C. O. D." package from the fourth floor to the shipping room. This spiral is also used to carry "Transfer" and "Paid" packages.



The spiral conveyor system whisks all packages instantly from any floor to their proper delivery counter in the basement—keeping Charge packages separate from all others.

Every Gravity Conveyor is a time and money saver. These pictures show how Gimbel Bros.' New York store uses a two-spiral Conveyor to carry sold merchandise from sales floor to delivery bins





A typical installation of an Otis Gravity Triple Spiral Conveyor. Each Conveyor is built to suit the individual demands of the store where it is to be installed.



If the "Charge" packages are to be separated from "Paid" and "C. O. D." purchases, two spirals are built within the circular shaft, each having an inlet at all the floors and delivering at separate points in the basement. Still another spiral may be needed to further separate "Will Call" packages or transfers, or this third spiral may lead from the stock-rooms on the top story and deliver at the ground floor, being used for a distributing stock spiral.

After the packages come gliding from the conveyors and are carried away on the traveling belts, sorted, routed and thrown into the delivery bins, the service of Otis equipment is finally rounded out by

## INCLINED ELEVATORS

**T**HESE usually lead from the shipping rooms in the basement to the street level.

The delivery boy wheels his loaded truck from the route bins to the foot of the Inclined Elevator. The lugs of the Inclined Elevator catch the truck and carry it automatically up the incline at a moderate speed, delivering it onto the sidewalk at the top.

Inclined Elevators are Escalators in principle (being a moving platform which revolves about sprockets at the upper and lower ends of travel) but made to carry "wheelers" or trucks as well as persons. To do this, malleable iron projecting lugs rise at each side of the treads about four inches above the surface of the treads and engage cleats fastened to the bottom of the trucks.

At both the upper and lower landings are iron comb-shaped gratings through which the treads pass over the sprockets for the return journey.

At each side of the frame of the Inclined Elevators are angle iron stanchions. To the upper ends of these stanchions are attached angle-iron rails with hardwood hand rails. On the inner side of these stanchions are boards, which form the projecting balustrades which hold the trucks in place. These balustrades are provided at their lower portions with a rubbing-board that relieves friction at the lower edge of the trucks.

The Duplex Inclined Elevator, as its name implies, is arranged for simultaneous ascending and descending service, so that the empty trucks may be sent down as rapidly as the packages are placed in the wagons. This is a very desirable arrangement because the descending load balances the ascending load, reducing the power consumption.





Exit of Inclined Elevator, Kaufman & Baer Co., Pittsburgh,  
showing direct access to shipping platform

While in motion the costs for power are very moderate, a low horse-power being all that is needed to operate; while at rest the Inclined Elevator acts as an exit and entrance to and from the street.

The principle of continuous motion is present in the Inclined Elevator as in the Escalator and its capacity for transporting trucks of merchandise is relatively as great as that of the Escalator for carrying passengers.

For all purposes the Inclined Elevator will not take the place of the vertical sidewalk lift, but for the particular purpose of moving merchandise rapidly, continuously and without the loss of a moment from route bins to delivery wagons it is without equal.

The utility of Inclined Elevators has been fully learned by such stores as:

John Wanamaker	Philadelphia	B. Altman & Co.	New York
Stern Brothers	New York	Hale Brothers	San Francisco
Abraham & Straus	Brooklyn	Scruggs, Vandervoort & Barney	St. Louis
N. Snellenburg & Co.	Philadelphia	Kaufman & Baer Co.	Pittsburgh
L. Bamberger & Co.	Newark, N. J.	J. B. Greenhut Co.	New York



Otis Duplex In-  
clined Elevator  
carrying trucks from  
shipping room to  
street level, Stern  
Brothers, New York



43rd Street  
exit of Inclined  
Elevator, Stern  
Brothers. The  
"wheelers" as  
they leave the  
Inclined Eleva-  
tor are rolled  
directly to the  
wagons and un-  
loaded. They  
are returned  
empty on the  
descending side  
of the machine.



**I**N this description of Otis store equipment we have necessarily, been brief. More complete descriptions of each apparatus, its purpose and use, are contained in our several catalogues which we shall be happy to send to you at your request.

Your present facilities may have seemed enough. We hope, then, this book will suggest better equipment and better methods; or if, in your present temporary quarters, you do not care to make improvements, remember these suggestions and consider them for inclusion in the plans of that long-cherished new store that some day you are to erect.

On the other hand, if your building is up-to-date, but the equipment unable to handle your increasing business, write to us. Let us consider your problems with you. It may be that we can work out plans that will be of profit to you. An experience of many years in store planning and merchandise handling has fitted us for just this sort of service.

Let us work together for better stores, bigger business.

OTIS ELEVATOR COMPANY

Eleventh Avenue and Twenty-sixth Street  
NEW YORK



## DIRECTORY OF OTIS ELEVATOR COMPANY OFFICES

### UNITED STATES

Akron, Ohio  
 Albany, N. Y.  
 Altoona, Pa.  
 Atlanta, Ga.  
 Atlantic City, N. J.  
 Augusta, Ga.  
 Baltimore, Md.  
 Birmingham, Ala.  
 Boston, Mass.  
 Buffalo, N. Y.  
 Charleston, S. C.  
 Charleston, W. Va.  
 Charlotte, N. C.  
 Chattanooga, Tenn.  
 Chicago, Ill.  
 Cincinnati, Ohio  
 Cleveland, Ohio  
 Columbia, S. C.  
 Columbus, Ohio  
 Dallas, Tex.  
 Davenport, Iowa  
 Dayton, Ohio  
 Denver, Colo.  
 Des Moines, Iowa  
 Detroit, Mich.  
 Duluth, Minn.  
 El Paso, Tex.  
 Erie, Pa.  
 Fort Wayne, Ind.  
 Fort Worth, Texas  
 Fresno, Cal.  
 Grand Rapids, Mich.  
 Harrisburg, Pa.  
 Harrison, N. J.  
 Hartford, Conn.  
 Houston, Texas.  
 Indianapolis, Ind.  
 Jacksonville, Fla.  
 Kalamazoo, Mich.  
 Kansas City, Mo.  
 Knoxville, Tenn.  
 Lincoln, Neb.  
 Little Rock, Ark.  
 Los Angeles, Cal.  
 Louisville, Ky.  
 Lynchburg, Va.  
 Macon, Ga.  
 Memphis, Tenn.  
 Milwaukee, Wis.  
 Minneapolis, Minn.  
 Mobile, Ala.  
 Montgomery, Ala.  
 Muskogee, Okla.  
 Nashville, Tenn.

New Haven, Conn.  
 New Orleans, La.  
 New York, N. Y.  
 Norfolk, Va.  
 Oakland, Cal.  
 Oklahoma City, Okla.  
 Omaha, Neb.  
 Peoria, Ill.  
 Philadelphia, Pa.  
 Pittsburgh, Pa.  
 Portland, Me.  
 Portland, Ore.  
 Providence, R. I.  
 Reading, Pa.  
 Richmond, Va.  
 Rochester, N. Y.  
 Rockford, Ill.  
 Sacramento, Cal.  
 St. Joseph, Mo.  
 St. Louis, Mo.  
 St. Paul, Minn.  
 Salt Lake City, Utah  
 San Antonio, Tex.  
 San Diego, Cal.  
 San Francisco, Cal.  
 Savannah, Ga.  
 Scranton, Pa.  
 Seattle, Wash.  
 Shreveport, La.  
 Sioux City, Iowa  
 Spokane, Wash.  
 Springfield, Mass.  
 Springfield, Mo.  
 Syracuse, N. Y.  
 Tacoma, Wash.  
 Tampa, Fla.  
 Toledo, Ohio  
 Trenton, N. J.  
 Tulsa, Okla.  
 Utica, N. Y.  
 Waco, Texas  
 Washington, D. C.  
 Wheeling, W. Va.  
 Wichita, Kan.  
 Wilmington, Del.  
 Worcester, Mass.  
 Youngstown, O.

### CANADA

Otis-Fensom Elevator  
 Company. Ltd.  
 Calgary, Alberta  
 Edmonton, Alberta  
 Halifax, Nova Scotia  
 Hamilton, Ontario  
 Montreal, P. Q.  
 Ottawa, Ontario

Quebec, P. Q.  
 Regina, Saskatchewan  
 Toronto Ont., Main Office  
 Vancouver, B. C.  
 Victoria, B. C.  
 Winnipeg, Manitoba

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Standard Waygood  
 Hercules, Limited  
 Adelaide, Australia  
 Auckland, N. Z.  
 Brisbane, Australia  
 Christchurch, N. Z.  
 Dunedin, N. Z.  
 Hobart, Tasmania, Aust.  
 Melbourne, Australia  
 Perth, Australia  
 Sydney, Australia  
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### AUSTRIA-HUNGARY

Otis Aufzugswerke  
 Gesellschaft, mit besch-  
 ränkter Haftung  
 Budapest, Hungary  
 Vienna, Austria

### BELGIUM

Compagnie Belge des  
 Ascenseurs Otis  
 Antwerp  
 Brussels  
 Ostend

### CHINA

Otis Elevator Company  
 New York, U. S. A.

### CUBA

Zaldo & Martinez  
 Havana

### DENMARK

Otis Elevator Company  
 Copenhagen

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Ateliers Otis-Pefre  
 Bordeaux  
 Lyon  
 Marseille  
 Nice  
 Paris

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Otis Aufzugswerke  
 Gesellschaft, mit besch-  
 ränkter Haftung  
 Berlin  
 Cologne  
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Fred. Stieltjes & Co.  
 Amsterdam

### INDIA

Balmer Lawrie & Co.  
 Calcutta

### JAPAN

American Trading  
 Company  
 Kobe  
 Tokio

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Otis Elevator Company  
 Mexico City

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Frank L. Strong Mach-  
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Otis Elevator Company  
 Moscow  
 Petrograd  
 Brun & Son  
 Warsaw

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 Buenos Aires, Argentine  
 Rio de Janeiro, Brazil  
 Rosario de Santa Fe, Arg.  
 Spencer & Waters  
 Santiago, Chile  
 Ernesto de Castro & Co.  
 Sao Paulo, Brazil  
 Spencer & Waters  
 Valparaiso, Chile

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Ateliers Otis-Pifre  
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Otis Aufzugswerke  
 Zurich  
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 Birmingham  
 Cardiff  
 Glasgow  
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